

THE HALPIN TRUST





SCIENTIFIC EXPEDITION FUND REPORT 2014-15

Funded by The Halpin Charitable Trust and the University of Exeter Annual Fund | Report: Ben Toulson

5th August 2015



The University of Exeter Scientific Expedition Fund

Report

This academic year has been a productive one for the University of Exeter Scientific Expedition Fund. In the summer of 2014 **£4,000** (£2,000 each), was awarded to two FXpeditions; Project Kep (Cambodia - <u>https://www.facebook.com/ProjectKep2014</u>), and Expedition Loholoka (Madagascar -<u>https://www.facebook.com/ExLoholoka14</u>). After almost a year of planning, both teams conducted successful expeditions, and helped enhance the University of Exeter's reputation overseas.

"Having the opportunity to organise and execute such an enormous project is a privilege that many other university students would not have." – Alex Millington, Project Kep 2014 Leader (pictured right).



About FXpeditions

While each student team takes full responsibility for planning and competing their project, the key aspects remain the same for all teams.

Valuable Research

Every FXpedition's primary goal is to conduct valuable scientific research in an area of the world that is real need of it. Many of them take place in developing countries, where conservation and ecological research have very little priority.

The research conducted by the teams promotes sustainable ways of living and attempts to help local people get the most out of their natural resources, whilst preventing overexploitation.



A nightjar spotted during Expedition Loholoka.

Local Collaboration

Every FXpedition works closely with local researchers and volunteers. The teams are sure to tailor their research to the needs of the country, its environments and its people.

Working with local people is invaluable, for they provide the teams with a knowledge and understanding of the terrain and the wildlife that dwells within it.

Preparation and planning

Each team spends many months planning and fundraising for their expeditions. Nothing is done for them, all results are the fruits of their own labours, and this speaks volumes of the students.

The planning process is long and difficult, but the students learn scores of new and invaluable skills that will be vital in their careers. This includes everything from budgeting, to grant-writing, logistics, advanced first aid training, the list goes on and on.

The teams raise their money through a combination of grants, fundraising activities, and their own personal contributions, with team members typically contributing around £750 each.

"It was a great experience to see the whole process of organizing an expedition from start to finish" – Hannah Pollock, Expedition Loholoka Logistics Manager.



The scenic Kep Province, a great setting for part of Project Kep's expedition.

Outreach

All FXpeditions aim to do their bit with local community before and after their projects. This can take the form of performing talks and workshops with local schools, scouts, and other groups. In addition, 2014 is the first year in which there are multiple FXpeditions taking place, on return the teams hope to put on an Expedition Exhibition for the general public.

Such events are great chance for the teams to engage with the public and inspire youngsters to pursue their interests in science and the natural world.

Use of funds

2014 Projects

£2,000: Project Kep - Cambodia

Project Kep 2014 was a multidisciplinary project that conducted terrestrial surveys of the flora and fauna of a few Cambodian islands. These included, Koh Rong Samloem and Islands of the Kep Province, namely Koh Seh and briefly Koh Ankrang. The team consisted of 13 students from the University of Exeter (UK) and the Royal University of Agriculture (Cambodia). All 6 of the UK students were in their first year of a biosciences degree based at the Penryn Campus, making their achievements all the more impressive.

"I'm so grateful to have been given the practical, logistical, moral and financial support of the University of Exeter in leading Project Kep in 2014." – Alex Millington, Project Kep 2014 Leader.



The Project Kep team (from left to right): Sam McNeil, Alex Millington, Rasmey Moul (Cambodia), Jo Clarke, Sally Sinclair, Calvert Mason and Peter Salter.



One of many treks during the expedition.

The team conducted surveys on a range of terrestrial taxa, focusing on the islands butterflies, birds, reptiles, amphibians and orchids. The UK team worked closely with the Khmer students, who helped them to gain a better understanding of local attitudes towards conservation through their own work. This expedition has provided a basis of knowledge on these taxa in a location where very little research has been previously performed. It also has provided the foundations for further research on these islands and posed questions that will encourage future work.

Project Kep was a follow-up expedition to Expedition Samloem 2013 (report available at <u>http://bit.ly/1nET2Qk</u>), and has now become Expedition FXCambodia (see below). The continuation of this project illustrates its strengths and further benefits to the students as expedition leader, Alex Millington, has outlined, "*It has developed a very broad set of transferable skills and to able to talk about the ongoing success of the project in an interview will no doubt make me stand out from the crowd*".

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£2,000: Expedition Loholoka - Madagascar

Expedition Loholoka was a six week project that took place in the summer of 2014 in the Loholoka region of Eastern Madagascar. The team, like Project Kep, was made up entirely of first year bioscience students from the University of Exeter who collaborated with students from the University of Antananarivo. The focus of the expedition was to study the biodiversity of mammals, birds, flora, reptiles and amphibians in the Loholoka forest.



The Expedition Loholoka (from left to right): Jamie Unwin, Hannah Smith, Hannah Pollock, Thomas Kent, Nicholas Davey and Susie Phillips.



"Gaining experience in grant writing was invaluable and has enabled me to successfully apply for other grants for different things following the expedition." – Hannah Pollock, Logistics Manager, pictured above.



"For me it really helped me become more confident because it involved things like talks, and cake sales, both of which were rather out of my comfort zone at first." – Nicholas Davey Kit Manager

The Expedition Loholoka team exploring the Loholoka forest.

The expedition was a great success with the team enjoying integrating into the local community and working with them to study the diverse habitats surrounding them. The team gained a much from the expedition but in reflection they illustrate how the planning and writing up stages of the project were just as valuable as being in the field.

"Even now as we're writing up the report a year on it shows that it's not just what you do in the field, it takes dedication and work to follow it all up." – Hannah Pollock, Logistics Manager

Having focused on writing up their findings in 2015, the team are hoping to get a new group of students set up to run a follow-up expedition to the Loholoka region in the summer of 2016. They hope that like Expedition FXCambodia, expeditions to Madagascar can become an annual opportunity for students.

2015 Projects

This summer £12,000 was awarded to three different expedition teams.

£5,000: Mission Manu – Peru

http://on.fb.me/1T70i0A

Mission Manu's research is being conducted in the Amazonian Rainforest around the Manu Learning Centre (MLC). The team are currently collect data on reptiles and amphibians (herptiles) using Visual Encounter Sampling, Audio Point Recordings, and Cover Boards and compare biodiversity estimates from each method against existing comprehensive biodiversity records maintained by the MLC.

The project will provide guidance on the effective survey methods for rapid term biodiversity censuses and thus provide a valuable tool for herptile conservation.



Globally, herptiles are in severe decline as a result of climate change, habitat loss and disease. Additionally, many threatened habitats that represent potential hotspots for herptile biodiversity remain unexplored by scientists. Thus, a key challenge for conservation is to develop survey techniques to rapidly assess herptile diversity, and identify priority habitats for protection.

Despite pressing need, there is limited data on the effectiveness of rapid surveying methods. The aim of this study is to determine which herptile survey methods are most effective at sampling biodiversity for rapid censuses.

£4,000: Expedition FXCambodia – Cambodia

http://on.fb.me/1IZ4r7v

Following on from the success of Project Kep 2014 and Expedition Samloem 2013, the Expedition FXCambodia team will be returning FXpeditions to Cambodia, strengthening the established links with Cambodian locals while helping to create a self-sustaining partnership project between FXpeditions, Cambodian students and conservation groups.



A mantis found during Expedition FXCambodia 2015.

Increasing tourism in Cambodia demonstrates the need to re-establish links with local organisations to advise development companies (who own the majority of Cambodian islands), on how to sustainably develop the islands. The expedition team are currently conducting biodiversity surveys on the Kep Islands to support the creation of a wildlife protected area, focussing on Avifauna, Lepidoptera, Herptiles, Orchids and Pitcher Plants. The team are working with students at The Royal University of Agriculture in Cambodia to learn from them about conservation needs in their country.



Expedition FXCambodia 2015 team member, Tom Day, taking in the views in the Kep Province

£3,000: Project Bawan – Borneo

http://on.fb.me/1gdEpjM

Project Bawan is a six week expedition in Bawan forest, located on the Indonesian island Borneo.

The team are conducting a herpetological study of the area to aid conservation efforts. Many amphibian and reptile species already face extinction due to habitat loss, climate change and disease. The team hope to find threatened species in Bawan, thus demonstrating that this rainforest needs protecting. With the help of their sponsors, the expedition aims to make positive steps towards securing the future of Bawan and other peatland rainforests, whilst providing crucial insight into the ecological importance of this unique habitat.



The Project Bawan team being welcome at the Palangka Raya University.

The team will use visual encounter surveys, pitfalls traps and acoustic logging to assess the relative species richness and abundance of herpetofauna. They will operate transects across a range of habitats including, primary forest, logged, burned or regenerating forest.



Not a bad view to greet the team's first morning in Palangka Raya.

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Next steps

With FXpeditions growing year on year it is exciting to see how these projects will develop. It currently looks as though there will be a minimum of 4 expeditions taking place next summer, continuing work in Cambodia and Madagascar, with new projects starting in Vietnam and Sri Lanka. We hope that this will increase our network across the globe, creating new links and further enhancing the University of Exeter's reputation on a global scale.

"Ultimately the whole process was a challenge with many ups and downs but all the skills learnt from independence to organisation to living and working in the field have been priceless" – Hannah Pollock, Expedition Loholoka Logistics Manager

We hope that this year's teams will exhibit their work at events with their sponsors, such as the RGS. For example, in 2013 the Expedition Samloem team sat on the panel for a biological sciences expedition workshop at the RGS Explore event in London.



A lizard spotted during Expedition Loholoka.

The difference

The financial support provided by The Halpin Charitable Trust and the University of Exeter Annual Fund makes a huge difference to FXpedition teams. They apply for this funding in November/December and get extensive feedback on their applications; this helps them apply for further grants, the majority of which are applied for between January and March. This creates a platform on which the team can build upon with further grants and other fundraising activities.

The financial backing from the Halpin Charitable Trust and the University of Exeter Annual Fund also gives credibility to an FXpedition team, making them more likely to succeed with other funding applications, networking, and publicity.

Thank you

On behalf of all FXpeditions teams and those associated with them I would like to say a final thank you to both the Halpin Charitable Trust and University of Exeter Annual Fund for their continued support. We are now starting to establish long term projects that will not only provide opportunities for students each year, but will create high impact projects that can make a real difference in areas of the world where sustainability and conservation are not necessarily priorities. With new FXpeditions being planned for 2015/16 it will be great to see the further expansion of these projects.



Children playing in the evening during Expedition Loholoka.

Photos by Hannah Pollock, Hannah Smith, Alex Millington, Peter Salter, Henry Traynor, Martin Berwick, and Mark D. Scherz.